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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER
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ART UNIT	PAPER NUMBER
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DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/273,261

Applicant(s)

Hattori et al.

Examiner

Dung Nguyen

Art Unit

2871



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 15, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 20) ☐ Other:

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***Response to Arguments***

Applicant's arguments dated 06/15/2001 has been received and entered.

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the dispersed carbon black (claim 1) must be shown or the feature(s) cancelled from the claim(s). No new matter should be entered.

***Specification***

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is confusing and unclear how the attachment film can be adjusted the quantity of transmitted light as well as adjusted color shades (emphasis added). Correction to the language is suggested to clarify the claimed subject matter.

Regarding claim 8, it is unclear how the acrylic adhesive can be included a carboxyl group and a hydroxyl group. For the purpose of examination, it is assumed that the acrylic adhesive having a carboxyl group or a hydroxyl group.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

6. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Iwata et al., US Patent No. 6,111,699.

The above claims are anticipated by Iwata et al. figure 4 which disclose an attachment film comprising:

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- a transparent substrate (12);
- an adhesive layer (16) containing carbon black dispersed (e.g. plastic beads 14);
- an anti-reflection layer (32).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al.,  
US Patent No. 6,111,699.

Iwata et al. disclose the claimed invention as described above except for the adhesive layer containing a coloring pigment (e.g. red and blue). One of ordinary skill in the art would have realized the desire to use an adhesive layer contains a coloring pigment different from the carbon black for adjusting colors different from black, e.g. blue or red. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to employ red or blue pigment in the adhesive film because it is a common practice in the art for adjusting color display in a display device.

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9. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al., US Patent No. 6,111,699, in view of Kawazu et al., US Patent No. 5,876,854.

Regarding claims 5-6, Iwata et al., as applied in prior rejection, disclose all claimed subject matter except the attachment film being colored in neutral gray. Kawazu et al. disclose the attachment film being colored in neutral gray. The a-value and b-value of neutral gray which are within  $\pm 5$  each when measured with a color different meter to reduce the dazzle caused by reflection and in order to assure correct color of displayed image (column 3 lines 15-34).

Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to make attachment film having color in neutral gray; and neutral gray having an a-value and b-value are within  $\pm 5$  to reduce the dazzle caused by reflection and in order to assure correct color of displayed image.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al., US Patent No. 6,111,699, in view of Baker et al., US Patent No. 5,200,477.

Regarding claim 7, Iwata et al. disclose the claimed invention as described above except for a diameter and a BET specific surface area of the carbon black particle. Baker et al. do disclose carbon black in the adhesive layer being an average particle diameter from 1 to 100 nm, and a specific surface area of from 30 to 1,500 m<sup>2</sup>/g. Thus, such disclosed range in Baker et al. makes possible the claimed range and overlapping ranges are at least obvious. See *In re Malagari*, 499 Fed.2d 1297, 182 USPQ 549 CCPA 1974.

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11. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al., US Patent No. 6,111,699, in view of Conforti et al., US Patent No. 5,620,819 and Ueda et al., US Patent No. 5,968,244.

Regarding claim 8, Iwata et al., as applied in prior rejection, disclose all claimed subject matter except adhesive layer containing an acrylic adhesive having a carboxyl group and/or a hydroxyl group and the carbon black is an acidic carbon black. Conforti et al. disclose an adhesive layer (18) having a carboxyl groups to develop rapidly substantial precuring and pre-curing adhesion (column 16 lines 54-59). Ueda et al. disclose a carbon black being an acidic carbon black to produce excellent dispersibility in water by increasing the surface area and having chemical properties akin to water-soluble dyes (column 2 lines 52-58). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to make adhesive layer containing an acrylic adhesive having a hydroxyl group or carboxyl group to develop rapidly substantial precuring and pre-curing adhesion. Also, it is known that carbon black is acidic to produce excellent dispersibility in water by increasing the surface area and having chemical properties akin to water-soluble dyes.

12. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al., US Patent No. 6,111,699, in view of Urano et al., US Patent No. 5,800,952.

Regarding claims 9-10, Iwata et al., as applied in prior rejection, disclose all claimed subject matter except that the adhesive layer further contains a photopolymerizable compound and a photopolymerization initiator. The adhesive layer contains a (meth) acrylate resin as an

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adhesive and a (meth) acrylate monomer or oligomer as photopolymerizable compound. Urano et al. disclose the adhesive layer further contains a photopolymerizable compound and a photopolymerization initiator to improve the developability, the sensitivity, the image-reproducing property and the adhesive property. The organic binder polymer material may, for example, be an alkyl ester which may have a substituent, of (meth) acrylate) and alkali-soluble polymer comprising a monomer having (meth) acrylic acid monomer or photopolymerizable compound to develop with alkali aqueous solution but not with organic solvent (column 2 lines 12-41 and Column 7 lines 17-36). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have adhesive layer containing a photopolymerizable compound, a photopolymerization initiator, (meth) acrylate resin to improve the developability, the sensitivity, the image-reproducing property and the adhesive property.

13. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al., US Patent No. 6,111,699, in view of Komiyama et al., US Patent No.5,356,949.

Regarding the above claims, Iwata et al., as applied in prior rejection, disclose all claimed subject matter except that the adhesive layer contains an acrylic adhesive having a carboxyl group and/or hydroxyl group and the carbon black is an acidic carbon black. The adhesive layer further contains a photopolymerizable compound and a photopolymerization initiator. The adhesive layer contains a (meth)acrylate resin as an adhesive and a (meth)acrylate monomer or oligomer as the photopolymerizable compound. Komiyama et al. disclose an adhesive layer



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contains an acrylic adhesive i.e. epoxy acrylate, polyester acrylate, (meth)acrylic acid, epoxy acrylate etc... having carboxyl group and hydroxyl group (col. 3, line 19-col.4, line 42).

Komiyama et al. also disclose an adhesive layer contains a photopolymerizable compound and a photopolymerization initiator; a (meth)acrylate resin as an adhesive (Abstract, col. 3, line 19-col.7, line 41). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to have the adhesive layer contains an acrylic adhesive, a photopolymerizable compound, a photopolymerizable initiator etc... for the benefits of improving the developability, the sensitivity, the image-reproducing property and the adhesive property.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al., US Patent No. 6,111,699, in view of Aoyama et al., US Patent No.6,147,732.

Iwata et al., as applied in prior rejection, disclose all claimed subject matter except for a hard coating layer and an anti-reflecting layer being consecutively formed on the other surface of a transparent substrate. Aoyama et al. disclose in Fig. 38 that the adhesive layer (12) is formed on one surface of a transparent substrate (25) and a hard coating layer (10) and an anti-reflecting layer (15) are consecutively formed on the other surface of the transparent substrate. It is noted that the materials of hard coating layer (10) of Aoyama et al. (col. 7, lines 26-34) are the same materials as those of applicant (page 7 of specification, lines 4-6, i.e. acrylic resin). Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ adhesive layer being formed on one surface of a transparent substrate.

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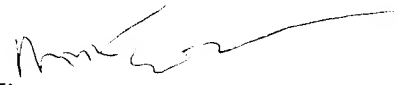
Furthermore, a hard coating layer and an anti-reflecting layer being consecutively formed on the other surface of the transparent substrate, for the ease to see the display image.

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dung Nguyen whose telephone number is (703) 305-0423. The fax phone number for this Group is (703) 308-7722.

Any information of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-0956.

  
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Patent Examiner  
Technology Center 2800

DN  
08/27/2001